CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER:

20-985

CORRESPONDENCE

DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC, OR AN ANTIBIOTIC DRUG FOR HUMAN USE

Form A	pproved: OMB No. 0910-0338
Frakes	tion Date: April 30, 2000
	Contract of the 20's 20's
906 CW	(B Statement on page 2.
	· FOR FDA USE ONT.Y

APPLICATION NUMBER

(Tille 2 a Code of Fe	deral Regulations, 31	<u> 14 & 601)</u>			
APPLICATION INFORMATION					
NAME OF APPLICANT		I D	ATE OF SUBMISSION	N	
Dermik Laboratories, Inc.			00	tober 28. 1999	ŀ
TELEPHONE NO. (Include Area Code).				nbut (Include Area Cede)	
(610) 454-3026			10) 454-5287		
APPLICANT ADDRESS (Munice, Street, City, State, C and U.S. Silgene gimber of proviously issued):	Country, 23P Codo or Mail Co			l'i NAME & ADDRESS (Mumber, 20 (mumber) IF APPLICABLE	real City State
500 Arcola Road		Ì			-
Collegeville, PA 19426		1			
,				·	
PRODUCT DESCRIPTION					
NEW DRUG OR ANTIBIOTIC APPLICATION	NUMBER, OR BIOLOG	ICS LICENS	E APPLICATION NU	MEER (If previously issued) NI	A 20-915
ESTABLISHED NAME (a.g., Proper name, US	PYUSAN meme)	PROPUL	ARY NAME (wede a	MANUAL ART	į,
(fluorouracil cream)			- Creen 0.5%	ME (If on)	
CHEMICAL/BIOCHEMICAL/BLOOD PRODU \$-fivero-2,4(1H,3H)-pyrimidiaedicae	CTNAME (Tary)		DL 6025		
DOSAGE PORM:	STRENGTHS	12	OUTS OF ADMINUS		
DOMESTORIA:	0.5%		picel		
topical cream			•	•	
(PROPOSED) INDICATION(S) FOR USE: To	opical treatment of n	mitiple act	inic or solar kera	tosis of the face and scalp	
				·	
APPLICATION INFORMATION					
APPLICATION TYPE		. 41	DOORWATER APPL	EATION (ANDA, AADA, 21 C	F 11490
(check cost) X NEW DEUG AFFLE	☐ BIOTOGICS INCE SYLLON (SI CENSIVA)				
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	New Drug Applica	tion		,	•
PROPOSED MARKETING STATUS (check	es) X 11	ESCRIPTIO	N PRODUCT (Rx)	OVER THE COUNTER	
MAGIR OF VOLUMES SUMMETING	33	APPLICATION	NE MER	MINISTANDELECTRONIC	
ESTABLISHMENT INFORMATION	•				
Provide locations of all magnifestaring package	ng and control alter for dra	C anparament on	ed drug product (contin	mation shoots may be used if nece	mary), incinde same,
Provide locations of all manufacturing gardens address, contact, telephone similar, registration conducted at the site. Please indicate whether the				Obe or secret (eft 1800) courte	Marie Sergeral America
See Attached			·		
Cross References (list related License	Application TNDs N	DAL PMA	4 510(k)4 IDRe 1	MFs, and DMFs reference	d in the current
epplication)	Whiteman many		-1 201/4-1		<u> </u>
See Attached			•		
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FORM FDA 3504 (7/97)

<u>X</u>	1. Index				
X	2. Labeling (check one) X Draft	Labeling	Final Printed Labeling		
х	3. Summary (21 CFR 314.50 (c))				
<u>×</u>	4. Chemistry section				
X	A. Cliemistry, manufacturing, and control info	ormation (e.g. 21 CFI	(314.50 (d) (1), 21 CFR 601.2)		
	B. Samples (2f CFR 34.50 (e) (1), 21 CFR				
X	C. Methods validation package (e.g. 21 CFR 314.50 (e) (2) (i), 21 CFP 601.2)				
X	5. Nonclinical pharmacolder and texticology secti	ion (e.g. 21 CFR 314.	50 (d) (2), 21 CFR 601.2)		
X	6. Human pharmacokinetics and bioavailability s				
X	7. Clinical Microbiology (e.g. 21 CFR 314.50 (d	(4))			
X	8. Clinical data section (e.g. 21 CFR 314.50 (d)				
x	9. Salety update report (e.g. 21 CFR 314.50 (d) (01.2)		
X	10. Statistical section (e.g. 21 CFR 314.50 (d) (6)	21 CFR 601.2)			
X	11. Case report tabulations (e.g. 21 CFR 314.50 (
X	12. Case reports forms (e.g. 21 CFR 314.50 (f) (2)				
X.	13. Patent information on any patent which claims		SS (b) or (ci)		
X	14. A patent certification with respect to any pater			435	
	15. Establishment description (21 CFR Part 600, 1				
X	16. Debarment certification (FD&C Act 306 (k) (
X	17. Field copy certification (21 CFR 314.50 (t) (3				
X	18. User Fee Cover Sheet (Form FDA 3397)	•			
X	19. OTHER 19A. Pediatric Use Waiver and 19B.	Financial Disclosure	Information		
CERT	TICATION				
I agree to	s update this application with new safety information ebout th t, precentions, or adverse reactions in the draft labeling. I agre	e product that may reacc a to automit active module	ubly affect the statement of contraindication reports as serviced for by completion or as	es, §	
recounts	i by FDA. If this application is approved, I agree to comply w e, but not limited to the following:	ith all applicable less an	i regulations that apply to approved applica	ulicae,	
L.	Good strengthetering practice regulations in 21 CFR 216 and	211, 606 miller 120 .	•	•	
2	Biological establishment standeris in 21 CFR Pert 600, Labeling regulations in 21 CFR 201, 606, 610, 660 and/or 8			•	
4	In the case of a prescription drag or biological product, presc	riction deux à deuxidon a	gnisdom in 21 CFR 202.	•	
	S. Regulations on making changes in application in 21 CFR 314.70, 314.71, 314.72, 314.97, 314.99, and 601.12. 6. Regulations on Reports in 21 CFR 314.80, 314.81, 600.80 and 600.61.				
7.	7. Local; state and Federal environmental impact lon. You've application applies to a drug product that FDA has proposed for achaelating under the Controlled Substances Act I agree sect to market the				
l product:	notil the Drug Enforcement Administration makes a final ache	edeline decidos.	• •		
الله مدلا	and information in this submission have been review and, to re a willfully false statement is a criminal offense, U.S. Code,	the best of my knowleads	and outlied to be true and accurate,		
SIGNA	TURE OF RESPONSIBLE OFFICIAL OR AGENT	TYPED NAME AND		DATE	
		Ronald F. Panner		10/28/99	
*	oneth T. I Anne	Worldwide Regul	SKOLY ATTRIES	10/20/33	
ADDR	BSS (Street, City, State, and ZIP Code)		Telephone Number		
500 A	mala Band		(610) 454-3026	· .	
	rcola Road reville, PA 19426	•		•	
Public	reporting burden for this collection of informati	on is estimated to ave	rage 40 hours per response, includin	the time for reviewing	
instruc	tions, searching existing data soutces, eathering and	maintaining the data	needed, and completing and reviews	ng the collection of	
ploco	ation. Send comments regarding this burden estimating this burden to:	e ot suh ogset subect	of this collection of information, inch	iding suggestions for	
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Hubert	H. Humphrey Building, Room 531-H	eformation turior	ired to respond to, a collection of a it displays a convently valid OSAID		
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j.					

NDA 20-985 17-Oct-2000

Questions Regarding Phase IV commitment for Dermik's fluorouracil cream, 0.5%

The following questions are to clarify the Phase IV commitments requested by DDDDP in a letter that was faxed to Dermik on October 13, 2000.

- 1. Please-provide clarification explaining specifically how the number of subjects studied does not reach the numbers recommended in the ICH EIA guidance and advice Dermik as to what the FDA would like Dermik to do in order to fulfill this request.
- 2. Are all of the Phase IV requests required to be collected in one study? Is there a priority or sequence in which the FDA would like Dermik to fulfill the commitment?
- 3. Dermik would like to discuss potential study designs with respect to:
- The number of patients that might fulfill the additional safety data and informational needs request for treatment of common skin surface areas
- How best to examine the specific questions of clinical interest (different areas of skin, recurrence, re-treatment, minimizing eye-irritation)

Dermik would like to have a clinical dialog with the FDA regarding the above mentioned points and thanks the FDA in advance for taking the time to discuss these questions.

APPEARS THIS WAY

Sporson's proposed PPI

APPEARS THIS WAY ON ORIGINAL

WITHHOLD___PAGE (S)

Draft

LABELING

PLEASE NOTE:

Since the sponsor has no tradename at the time of action, I have chosen to leave the tube and carton labels that were in the original NDA in the action package. See section under TRADENAME.

When they do have a tradename, the sponsor will submit a SLR to the NDA with new art work/logo/etc..
VL



WITHHOLD 57 PAGE (S)

Draft

LAPELING

UKIGINAL



• A RHONE-POULENC RORER COMPANY •

January 25, 2000

NEW CORRESP

500) ARCOLA ROAD P.O. BOX 1200)
COLLEGEVILLE, PA 194262007
TEL, 610-454-8000

Rockville, MD 20850

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115



NDA 20-985 Cream 0.5% (fluorouracil cream)

Amendment to a Pending Application

Dear Dr. Wilkin:

Reference is made to your December 2, 1999 letter acknowledging receipt of our New Drug Application for Cream.

In the letter, you provided us with the pediatric study requirements and informed us that our waiver request with supporting information and documentation should be submitted within 60 days of receipt of your December 2, 1999 letter.

This submission addresses our request for a waiver of the pediatric study requirement which was included in our original October 28, 1999 NDA submission.

If you have any questions or require any additional information, please contact me at (619) 454-3026.

Sincerely yours

Ronald F. Panner

Senior Director

Worldwide Regulatory Affairs

RFP/jpt/maf Enclosures BEST POSSIBLE COPY

Desk Copy: Ms. Vickey Lutwak, Project Manager

NUTE: 2nd copy of letter for VL as a desk copy.

DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION		R	EQUEST FOR CONSU	LTATION	
(Division/Office): UPDRA Jerry Phillips				ггом:HFD-540 Vickey Lut	wak
1-7-00	IND NO.		NDA NO. NDA 20-985	TYPE OF DOCUMENT	DATE OF DOCUMENT
NAME OF DRUG PRIORITY CONSIDERATION Cream 0.5%			CONSIDERATION	CLASSIFICATION OF DRUG	DESIDENCE COMPLETION DATE
NAME OF FIRM: Dermik Laboratories, Inc. REASION FO				R REQUEST PLOSE	
☐ NEW PROTOCOL ☐ PROGRESS REPORT ☐ NEW CORRESPONDEN ☐ DRUG ADVERTISING ☐ ADVERSE REACTION I ☐ MANUFACTURING CH ☐ MEETING PLANNED B	REPORT ANGE/ADDITION	000		LETTER	
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YPE A OR B NDA REVIEW LEND OF PHASE II MEETING CONTROLLED STUDIES PROTOCOL REVIEW OTHER (SPECIFY BELOW):				☐ CHEMISTRY REVIEW ☐ PHARMACOLOGY ☐ BIOPHARMACEUTICS ☐ OTHER (SPECIFY BELOW):	-A-1
			IIL BIOPHAR	MACEUTICS	
☐ DISSOLUTION ☐ BIOAVAILABILTY STUDIES ☐ PHASE IV STUDIES				☐ DEFICIENCY LETTER RESPONSE ☐ PROTOCOL-BIOPHARMACEUTICS ☐ IN-VIVO WAIVER REQUEST	3
	IV. DRUG EXPERIENCE				
U PHASE IV SURVEILLANCE/EPIDEMIOLOGY PROTOCOL DRUG USE e.g. POPULATION EXPOSURE, ASSOCIATED DIAGNOSES CASE REPORTS OF SPECIFIC REACTIONS (List below) COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP			IATED DIAGNOSES slow)	☐ REVIEW OF MARKETING EXPERI ☐ SUMMARY OF ADVERSE EXPERI ☐ POISION RICK ANALYSIS	
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COMMENTS/SPECIAL I Evaluation of trade Draft Tube and Car Will be sent by mail	name:			ze	
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The following manyes were used during development for the 0.5% fluorouracil topical cream, which is the subject of this original NDA. The technical reports and documents in this NDA contain several different names for the 0.5% fluorouracil topical cream. These are listed below.

0.5% FU Cream

- 5-FU 0.5% cream
- 5-Fluorouracil cream
- 5-Fluorouracil 0.5% Topical Cream
- 5-fluorouracil cream 0.5%
- 5-Fluorouracil Cream 0.5%
- 0.5% 5-FU cream with Microsponge®
 - FU
 - ~ 5-FU
- 5-FU (0.5%) Topical Cream
- → 5-Fluorouracil (5-FU) 0.5% Cream

Dermik 5-FU 0.5% cream
Dermik's 5-FU 0.5% cream
DL6025
Experimental 0.5% 5-FU Formulatio

Experimental 0.5% 5-FU Formulation fluorouracil 0.5% cream

The tradename for this product is _____ This name only appears in the proposed package insert and product labeling in this original NDA.

APPEARS THIS WAY ON ORIGINAL

DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE FOOD AND DRUG ADMINISTRATION		REQUEST FOR CONSULTATION					
wision/Office): Perek Goonee		7	FROM: Vickey Lutwak HDF540 7-2045- 20		ns 2073		
Date 0008,1999	IND NO.		NDA-NJ. 20-985	TYPE OPPOCUMENT N'D A		DATE OF DOCUMENT	
name of drug 5 Flundourl	icil	PRIORITY	CONSIDERATION	CLASSIFICATION OF I	DRUG	DESIRED COMPLETION DATE	
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		 	REASION FO	R REQUEST	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
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			II. BIOM	ETRICS		•	
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☐ TYPE A OR B NDA REVIEW ☐ END OF PHASE II MEETING ☐ CONTROLLED STUDIES — OTOCOL REVIEW HER (SPECIFY BELOW):			☐ CHEMISTRY REVIE ☐ PHARMACOLOGY ☐ BIOPHARMACEUTIC ☐ OTHER (SPECIFY BI	CS CS			
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☐ DISSOLUTION ☐ BIOAVAILABILTY STUDIES ☐ PHASE IV STUDIES			☐ DEFICIENCY LETTER RESPONSE ☐ PROTOCOL-BIOPHARMACEUTICS ☐ IN-VIVO WAIVER REQUEST				
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☐ PHASE IV SURVEILLANCE/EPIDEMIOLOGY PROTOCOL ☐ DRUG USE e.g. POPULATION EXPOSURE, ASSOCIATED DIAGNOSES ☐ CASE REPORTS OF SPECIFIC REACTIONS (List below) ☐ COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP			☐ REVIEW OF MARKE ☐ SUMMARY OF ADV ☐ POISION RICK ANAI	ERSE EXPERI	ENCE, DRUG USE AND SAFETY ENCE		
V. SCIENTIFIC INVESTIGATIONS							
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500 ARCOLA ROAD

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL, 610-454-8000

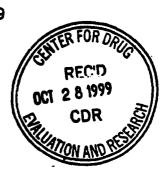
Jonathan K. Wilkin, M.D., Dissor
Division of Dermatologic and REC'D
Dental Drug Products
Attention: Document Control Room 29 1999
Food and Drug Administration, MEGA DOC RIV
Park Building, Room 214
12420 Parklawn Drive
Rockville, MD 20852

October 28, 1999

REC'D

REGA DOC RM

MEGA DOC RM



New Drug Application No. 20-985

Cream 0.5%
(fluorouracii cream)

ORIGINAL NEW DRUG APPLICATION

Dear Dr. Wilkin:

In accordance with 21 CFR 314.50 of the Federal Food, Drug and Cosmetic Act, Dermik Laboratories, Inc. is submitting an original New Drug Application for Cream 0.5% (fluorouracil cream) which demonstrates the efficacy and safety of the product in the topical treatment of patients with multiple actinic or solar keratosis of the face and scalp.

This application contains the following sections: 1) Index, 2) Draft Labeling, 3) Application Summary, 4) Chemistry, Manufacturing and Controls (Including Sample Information and Methods Validation Package, 5) Nonclinical – Pharmacology and Toxicology, 6) Human Pharmacokinetics and Bioavailability, 7) Microbiology, 8) Clinical Data, 10) Statistical, 11) Case Report Tabulations, 12) Case Report Forms, 13) Patent Information, 14) Patient Certification, 16) Debarment Certification, 17) Field Copy Certification, 18) User Fee Cover Sheet, and 19A) Pediatric Use Waiver, and 19B) Financial Disclosure Information.

Information is also included in electronic format consisting of SAS datasets for the pivotal clinical trials, and electronic copies of final study reports for the phase III trials and the integrated summaries. This information is contained on diskettes attached in the first volume of this NDA submission (Item 3, Volume 1, Page 168). No computer viruses were detected when these disks were scanned using

Software, LTD Version

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL. 610-454-8000

October 28, 1999

Jonathan K. Wilkin, M.D., Director Division of Dermatologic and Dental Drug Products Attention: Document Control Room Food and Drug Administration Park Building, Room 214 12420 Parklawn Drive Rockville, MD 20852

New Drug Application No. 20-985

Cream 0.5%
(fluorouracil cream)

ORIGINAL NEW DRUG APPLICATION

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Jonathan K. Wilkin, M.D. October 28, 1992.
Page 2

In accordance with the Prescription Drug Use Fee Act of 1992, a check No.
in the amount of \$272,282.00 was sent to the Food and Drug
Administration, Pittsburgh, Pennsylvania on October 12, 1999. This application
was assigned User Fee Identification Number 3825.

As required by Section 306(k)(1) of the Generic Drug Enforcement Act {21 U.S.C. 335a (k)(1)}, we hereby certify that, in connection with this application, Dermik Laboratories, Inc. did not and will not use in any capacity the services of any person debarred under subsections 306(a) or (b) of the act.

Dermik Laboratories, Inc. considers the information in this application to be confidential and proprietary and we request that no portions thereof be disclosed to third parties, under FOI or otherwise, without first obtaining written consent from Dermik Laboratories, Inc.

If you have any questions or require any additional information during review of this application, please contact me at (610) 454-3026.

Sincerely,

Ronald F. Panner Senior Director

Worldwide Regulatory Affairs

RFP/JPT/maf Enclosures

APPEARS THIS WAY ON ORIGINAL

ORIGINAL



NEW CORRESP

NC

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

December 7, 1999

4000

· A RHÔNE-POULENC RORER COMPANY =

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850



NDA 20-985

Cream 0.5%

(fluorouracil cream)

Response to FDA Request for Information

Dear Dr. Wilkin.

This amendment responds to three of Ms. Lutwak's requests. Our response to the request for references for the annotated labeling will be submitted shortly.

If you have any questions or require any additional information, please contact me at (610) 454-3027.

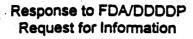
Sincerely,

James B. Thomason

James P. Thompson Manager

Worldwide Regulatory Affairs

APPEARS THIS WAY ON ORIGINAL



1. DDDDP Request: Please provide us with additional desk copies of Volumes 1.30, 1.31, 1.32 and 1.33 from the Cream NDA.

Demik Response: Included in this submission are copies of the requested four volumes. There are two sets of the four volumes. One set is for the Clinical Reviewer. The other set is for the Statistical Reviewer.

2. DDDDP Request: Please provide us with a desk copy of Volume 1.5 of the Cream NDA.

Dermik Response: Included in this submission is a desk copy of Volume 1.5 (Methods Validation) of the application.

- 3. DDDDP Request:
 - Please provide the full references referred to in the annotated label.
 - Annotate and provide the full references used for the description of the teratogenicity associated with 5-fluorouracil;
 - Annotate and provide the full references used for the information provided in the carcinogenesis, mutagenesis and impairment of fertility section of the label:
 - Provide the estimate of maximum daily human topical dose in mg/kg and mg/m² that was used for calculating fold exposure levels in the label.

Dermik Response: A response will be provided shortly.

4. DDDDP Request: Please provide electronic copies of the SAS data sets for the Reviewing Statistician.

Dermik Response: Included in this submission are 2 electronic copies (disks) of the SAS pata Sets you requested. One disk is for the Archival Copy of the NDA. It should be placed in the plastic disk holder located at the end of Volume 1. The other disk belongs in the Review Copy of the NDA. This copy of the SAS Data Sets should be given to the Statistical Reviewer.

APPEARS THIS WAY
ON ORIGINAL

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eviewice on of ons for

– A RHÔNE-POULENC RORER COMPANY –

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

December 10, 1999

ric

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville. MD 20850

NDA 20-985 Cream 0.5%

(fluorouracii cream)

Amendment to a Pending Application

Dear Dr. Wilkin,

A typographical error has been detected in four tables containing the same information. In these tables, information pertaining to study DL6025-9715 was inadvertently provided for study DL6025-9815. The tables have been corrected and clarification of the Age, Sex and Race column are also provided. Enclosed please find replacement pages which contain the wording "Revised 12/2/99" under the NDA page number for insertion into the appropriate volumes. One table is found in Item 3, the Overall NDA Summary, and three of the tables are in Item 8, the clinical data section of NDA #20-985 and are located on the following NDA pages:

NDA Volume Number	(NDA Item No Item Volume No Volume Page No.)		
1.1	3-1-85		
1.17	8-1-4	ORIGINAL	
1.17	8-1-8	ONIONAL	
1.17	8-1-32		

Jonathan K. Wilkin, M.D. December 10, 1999
Page 2

Three sets of corrected pages, one for the Archival Copy and one set each for the Clinical and Statistical Review Copy of the NDA, are enclosed. Also enclosed are 15 desk copies of the replacement table for Volume 1.1. We apologize for any inconvenience this may cause.

If you have any questions or require any additional information, please contact me at (610) 454-3026.

Sincerely yours,

Ronald F. Panner Senior Director

Worldwide Regulatory Affairs

RFP/jpt/maf Enclosures

APPEARS THIS WAY ON ORIGINAL 500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL. 610-454-8000

December 10, 1999

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

NDA 20-985
Cream 0.5%
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NDA Volume Number	(NDA Item No Item Volume No Volume Page No.)
1.1	3-1-85
1.17	8-1-4
1.17	8-1-8
1.17	8-1-32

Jonathan K. Wilkin, M.D. December 10:1929
Page 2

Three sets of corrected pages, one for the Archival Copy and one set each for the Clinical and Statistical Review Copy of the NDA, are enclosed. Also enclosed are 15 desk copies of the replacement table for Volume 1.1. We apologize for any inconvenience this may cause.

If you have any questions or require any additional information, please contact me at (610) 454-3026.

Sincerely yours,

Ronald F. Panner

Senior Director

Worldwide Regulatory Affairs

RFP/jpt/maf Enclosures

Desk Copy: Ms. Vickey Lutwak, Project Manager

APPEARS THIS WAY
ON ORIGINAL

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

BC

January 18, 2000

Jonathan K. Wilkin, M.D., Director Division of Dermatologic and Dental Drug Products Center for Drug Evaluation and Research Office of Drug Evaluation V 9201 Corporate Boulevard

Food and Drug Administration

Building No. 2, Second Floor, Room N115 Rockville, MD 20850

> Cream. 0.5% (fluorouracil cream)

NDA #20,985

INFORMATION AMENDMENT: Chemistry, Manufacturing and Controls

Dear Dr. Wilkin.

Reference is made to our October 18, 1999 New Drug Application containing, in part, CMC information for Cream, 0.5% (fluorouracil cream).

Included in this submission is the 12-Month Interim Stability Report for 5-Fluorouracil Cream. 0.5%. Packaged in ______ 30 Gram FDPE-Tubes. All stability data is within the proposed product specifications. Please note the corrections in the stability data tables for transcription errors in some of the 9 month methylparaben and propylparaben data previously filed in the October 18, 1999 original NDA. The corrected values have been bolded in tables 3 - 5 and 9 - 11 for your convenience.

If you have any questions or comments regarding this submission, please contact me at (610) 454-3034 or James Thompson at (610) 454-3027.

Sincerely,

Jo Anne Calleri

Manager, CMC Liaison

Worldwide Regulatory Affairs

Enclosures

cc: Debra L. Pagano Philadelphia District Pre-Approval Manager U.S. Food and Drug Administration Room 900, U.S. Customhouse 2nd and Chestnut Streets Philadelphia. PA 19106-2973

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL. 610-454-8000

January 18, 2000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

BL

NDA 20-985

Cream 0.5% (fluorouracil cream)

Amendment to a Pending Application

Dear Dr. Wilkin:

This submission responds to Ms. Lutwak's comments.

If you have any questions or require any additional information, please contact me at (610) 454-3026.

Sincerely yours,

Senior Director

Worldwide Regulatory Affairs

RFP/jpt/maf Enclosures

Desk Copy: Ms. Vickey Lutwak, Project Manager

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC, OR AN ANTIBIOTIC DRUG FOR HUMAN USE (Title 21. Code of Federal Regulations, 314 & 601)

Form Approved. OMB No. 0910-0338 Expiration Date: April 30, 2000 See OMB Statement on page 2. FOR FDA USE ONLY

APPLICATION NUMBER-

APPLICATION INFORMATION				
NAME OF APPLICANT	DATE OF SUBMISSION			
Demuk Laboratories, Inc.	January 18, 2000			
TELEPHONE NO. (Include Area Code) (610) 454-3026	FACSIMILE (FAN) Number (Include A-62 Code) (610) 454-5287			
AFFLICANT ADDRESS (Number, Street, City, State, Country, ZIP Code or Mail Code, and U.S. License number if previously issued):	AUTHORIZED U.S. AGENT NAME & ACCRESS Number, Street City, State ZIP Code, telephone & FAX number) IF AFFLICABLE			
500 Arcola Road	- المنظمة المن			
P.O. Box 5096				
Collegeville. PA 19426				
PRODUCT DESCRIPTION				
NEW DRUG OR ANTIBIOTIC APPLICATION NUMBER OR BIOLOGICS I				
	OPRIETARY NAME (trade name) IF ANY			
(fluorouracil cream)	Cream 0.5%			
CHEMICAL BIOCHEMICAL BLOOD PRODUCT NAME (If any) 5-fluoro2.4(1H.3H)-pyrmidinedione	CODE NAME (If any) DL-6025			
DOSAGE FORM: intranasai Spray STRENGTHS cream 0.5%	ROUTE OF ADMINISTRATION:			
(PROPOSED) INDICATION(S) FOR USE: Topical treatment of multiple actinic or solar keratosis of the face and scalp				
APPLICATION INFORMATION				
APPLICATION TYPE				
(check one) X NEW DRUG APPLICATION (21 CFR 314.50) BIOLOGICS LICENSE A	ABBREVIATED APPLICATION (ANDA. AADA, 21 CFR 314.94) PPLICATION (21 CFR part 601)			
IF AN NOAL IDENTIFY THE APPROPRIATE TYPE X 505 (b)(1)			
IF AN ANDA OR AADA IDENTIFY THE REFERENCE LISTED DRUG PRODUCT THAT IS THE BASIS FOR THE SUBMISSION				
Name of Drug Holder o	Approved Application			
TYPE OF SUBMISSION	TA GAT TO A BEATING ADDITION TO THE TREE THE GOSTON			
(check one) ORIGINAL APPLICATION X AMENDMENT TO A PENDING APPLICATION TO RESUBMISSION				
PRESUBMISSION ANNUAL REPORT ESTABLISHMENT DESCRIPTION SUPPLEMENT SUPAC SUPPLEMENT				
EFFICACY SUPPLEMENT LABELING SUPPLEMENT CHEMISTRY MANUFACTURING AND CONTROLS SUPPLEMENT OTHER				
REASON FOR SUBMISSION Amendment to a Pending Application				
PROPOSED MARKETING STATUS (check one) X PRESCR	PTION PRODUCT (Rx) OVER THE COUNTER PRODUCT (OTC)			
NUMBER OF VOLUMES SUBMITTED. THIS APPLIE				
NUMBER OF VOLUMES SUBSUITED.	ATION IS X PAPER PAPER AND ELECTRONIC ELECTRONIC			
ESTABLISHMENT INFORMATION				
Provide locations of all manufacturing, packging and control sites for drug substance and drug product (continuation sheets may be used if necessary). Include name, address, contact, telephone number, orginal dosage form, Stability testing) conducted at the site. Please indicage whether the site is ready for inspection or, if not, when it will be ready.				
See Original NDA				
Cross References (list related License Application, INDs, NDAs, I application)	MAs, 510(k)s, IDEs, BMFs, and DMFs referenced in the current			
See Original NDA				

·RM FDA 356h (7/9")

Created by Electronic Document Services USDHES (301) 443-3454 EF

PAGE 1

Response to FDA/DDDP Request for Information

FDA Comment:

It is requested that the sponsor provide the full references referred to in the annotated label. Reference numbers are listed in the annotated label, but there is no reference list provided to match the numbers. In addition, it is requested that the sponsor annotate and provide the full references used for the description of the teratogenicity associated with 5-fluorouracil provided in the label. Also, it is requested that the sponsor annotate and provide the full references used for the information provided in the carcinogenesis, mutagenesis and impairment of fertility section of the label.

Dermik Response:

Attached is a copy of the full prescribing information for ———— Cream that has been revised as requested by Ms. Lutwak.

FDA Comment:

It is requested that the sponsor provide the estimate of maximum daily human topical dose in mg/kg and mg/m² that was used for calculating fold exposure levels in the label.

Dermik Response:

Anticipated maximum clinical dose = 2.0 g cream per 50 kg person per day = 40 mg/kg of 0.5% cream = 0.2 mg/kg/day 5-FU.

km (surface area conversion factor) for humans = 371

 $mg/m^2 = 0.2 mg/kg \times 37 = 7.4 mg/m^2/day.$

Freireich, E.J., et al., 1966. Quantitative comparison of toxicity of anticancer agents in mouse, rat, hamster, dog, monkey and man. Cancer Chemotherapy Reports. 50:219-244.



ORIGINAL MEM CORRESP



DERMIK LABORATORIES, INC.

- A RHÔNE-POULENC RORER COMPANY =

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-010 TEL, 610-454-8000

January 25, 2000

Jonathan K. Wilkin, M.D., Director Division of Dermatologic and Dental **Drug Products** Center for Drug Evaluation and Research Office of Drug Evaluation V Food and Drug Administration 9201 Corporate Boulevard Building No. 2, Second Floor, Room N115 Rockville, MD 20850



NDA 20-985 Cream 0.5% (fluorouracil cream)

Amendment to a Pending Application

Dear Dr. Wilkin:

Reference is made to your December 2, 1999 letter acknowledging receipt of our New Drug Application for — Cream.

In the letter, you provided us with the pediatric study requirements and informed us that our waiver request with supporting information and documentation should be submitted within 60 days of receipt of your December 2, 1999 letter.

This submission addresses our request for a waiver of the pediatric study requirement which was included in our original October 28, 1999 NDA submission.

If you have any questions or require any additional information, please contact me at (610) 454-3026.-

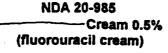
Senior Director

Worldwide Regulatory Affairs

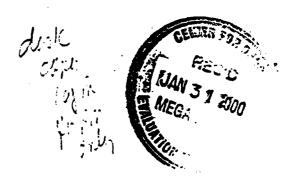
RFP/jpt/maf **Enclosures**

Desk Copy: Ms. Vickey Lutwak, Project Manager

next letter date copy by-is







Please refer to Dermik's October 28, 1999 original NDA filing for (fluorouracil cream) Cream 0.5% which contains Dermik's request for a full waiver of the pediatric study requirement. The waiver request is located on page 1-1-10 of Volume 1. A duplicate copy of our waiver request from the original NDA submission is included in this submission as an attachment.

Also included in this submission is a printout of data from the for actinic keratosis treatment by modality (termed "uses") and patient age, for a one-year period ending November 1999. This printout was not included in the original NDA filing. The data reflect 1,838,000 modality uses to treat actinic keratosis in this period. The lowest demographic catagory of patients with any modality use reported is age 11 to 20 years. The reported the following uses by modality for this demographic category:

MAT/NO/99 Uses (000)

Liquid Nitrogen 3
Retin-A 3
Erythromycin Base 3
Cleocin-T 3

Overall, patients in this lowest demographic category accounted for a small percentage of modality uses to treat actinic keratosis. It is concluded that — Cream 0.5% is not likely to be used in a substantial number of pediatric patients for the treatment of multiple actinic or solar keratosis of the face and scalp.

BEST POSSIBLE COPY

APPEARS THIS WAY ON ORIGINAL 500 ARCOLA ROAL P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL. 610-454-8000

Febuary 1, 2000

Jonathan K. Wilkin, M.D., Director Division of Dermatologic and Dental **Drug Products** Center for Drug Evaluation and Research Office of Drug Evaluation V Food and Drug Administration 9201 Corporate Boulevard Building No. 2, Second Floor, Room N115 Rockville, MD 20850



NDA 20-985 -> Cream 0.5% (fluorouracil cream)

NC

Response to FDA Request for Information

Dear Dr. Wilkin,

Reference is made to a January 18, 2000 telephone call from DDDDP Project Manager Ms. Victoria Lutwak requesting additional copies of Volumes 1.4 and 1.5 of the original NDA for _____ (fluorouracil cream) - Cream 0.5%. Ms. Lutwak asked that these volumes be sent directly to the Microbiologist Reviewer, Bryan Riley, at the Parklawn Building.

As requested by Ms. Lutwak, the requested volumes were sent to Mr. Riley via overnight mail as of the date of this letter.

If you have any questions or require any additional information, please contact me at

(610) 454-3027.

Rònald F. Panner **Senior Director**

Worldwide Regulatory Affairs

2 Desk Copies: Mr. Bryan Riley, Microbiologist, Office of New Drug Chemistry

BEST POSSIBLE COPY ORIGINAL

DERMIK LABO

Dedicuted to Dermatology

ARCOLA ROAD BOX 1200 LLEGEVILLE. PA 19426-0407 61. 610-454-8000 March 3, 2000

onathan K. Wilkin, M.D. prector
privision of Dematologic and Dental Drug Products,
4FD-540
penter for Drug Evaluation and Research
food and Drug Administration
201 Corporate Blvd.
lockville, MD 20850-3202

MEGA DOC RM

NDA 20-985

(fluorouracil cream) 0.5%

Amendment to a Pending Applica FDA Request for Information

This dute is conserved on the enchical corp.

Jear Dr. Wilkin,

Reference is made to a February 23, 2000 telephone call from Project Manager Ms. Vickey Lutwak concerning Dermik's NDA for Cream (fluorouracil cream) 0.5%. During our conversation Ms. Lutwak requested the submission of specified clinical data already noticed in our application on a CD Rom. This request was made for the Medical Reviewer.

included in this submission is a CD Rom containing the requested information.

Please note that the SAS data sets are not being submitted on a CD Rom at this time. Dermik will submit the SAS data sets on a CD Rom when the reviewing statistician confirms that the computer disc originally submitted is properly formatted as discussed at the Pre-NDA meeting held July 26, 1999.

If Dermik can provide you with any additional information, please contact me at 610 454-3027.

Sincerely,

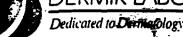
James B. Thompson

James P. Thompson

Manager

Worldwide Regulatory Affairs

JPT/arz Attachments



5(0) ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

June 9, 2000

AMENDMENT

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850



NDA 20-985

Cream 0.5% (fluorouracil cream)

INFORMATION AMENDMENT: Chemistry, Manufacturing and Controls

Dear Dr. Wilkin,

Reference is made to our October 18, 1990 CMC information for Cream, also made to our January 18, 2000 Information with a 12-Month Interim Stability Report for	0.5% (fluorouracil cream). Reference is ation Amendment updating this application
Included in this submission is the 18-month Cream, 0.5%, Packaged in 3 within the proposed product specifications.	0 Gram HDPE Tubes. All stability data is
If you have any questions or require any actions of require and actions of require actions of requi	
	Sincerely yours, James P. Thompson Manager Worldwide Regulatory Affairs

JPT/maf Enclosures

ORIGINAL

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000 NDA CAIG AMENDMENT

June 22, 2000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

~ M

NDA 20-985

Cream 0.5%
(fluorouracii cream)



Response to FDA Request for Information

Dear Dr. Wilkin,

Reference is made to a June 6, 2000 fax we received from DDDDP Project Manager Ms. Victoria Lutwak requesting additional information for the ______ (fluorouracil cream) Cream 0.5% reviewers.

Included in this submission is Dermik Laboratories, Inc.'s response to Ms. Lutwak's request.

If you have any questions or require any additional information, please contact me at (610) 454-3027.

Sincerely yours,

James P. Thompson

Manager

Worldwide Regulatory Affairs

JPT/maf Enclosures

ORIGINAL

Dedicated to Dermutolo

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19-26-0107 TEL, p10-454-8000

June 26, 2000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850



WENDMENT

BC

Cream, 0.5%

(fluorouracil cream)

NDA #20,985

INFORMATION AMENDMENT: Chemistry, Manufacturing and Controls

Dear Dr. Wilkin,

Reference is made to our October 18, 1999 New Drug Application containing, in part. CMC information for Cream, 0.5% (fluorouracil cream).

A Pre-Approval inspection of our contract manufacturer. Pharmaceutical Manufacturing Research Services, Inc., was conducted on June 15, 16, 19, 20, 2000. The FDA Investigator, Ms. Debra J. Bennett of the Montgomeryville, PA field office, requested that Dermik amend the pending NDA to include a proposed master manufacturing and packaging batch record. Included in this submission are the proposed master batch record and a copy of the Dermik letter of commitment, as provided to Investigator Bennett during the inspection.

If you have any questions or comments regarding this submission, please contact me at (610) 454-8094 or James Thompson at (610) 454-3027.

Sincerely,

Edward J. Smith Manager, CMC

Drug Regulatory Affairs

DUCCIBLE LUDA

ORIGINAL

P.O. BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

NDA ORIC AMENDMENT

July 7, 2000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental
Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850



511

NDA 20-985

(fluorouracil cream)

Amendment to a Pending Application Response to FDA Request for Information

Dear Dr. Wilkin:

Included in this submission are the draft patient instructions Ms. Lutwak requested. These draft instructions are the same as those that were faxed to Ms. Lutwak on June 30, 2000. Also included is an electronic copy (disk) of the same draft instructions.

If you have any questions or require any additional information, please contact me at (610) 454-3027.

Sincerely yours,

James P. Thompson

Manager

Worldwide Regulatory Affairs

James F. 1hr

JPT/arz Enclosures

Desk Copy: Ms. Victoria L. Lutwak. Project Manager

CRIGINAL

Facsimile Cover Page

Date: 21 June 2000

To: Ms. Victoria Lutwak

Company: FDA

Department: DDDDP

Phone #: 301-827-2073 Fax Number: 301-827-2075

From: Jim Thompson

Department: Regulatory Affairs

Phone #: 610-454-3027 **Fax Number:** 610-454-5287

Pages Sent: 15

Subject: NDA 20-985. (fluorouracil cream)

Attached is Dermik's response to your June 20, 2000 fax memo commenting on our——; NDA. An official submission containing the same information will be made tomorrow.

APPEARS THIS WAY
ON ORIGINAL

00 ARCOLA ROAD 2.0 BOX 1200 COLLEGEVILLE. PA 19426-0107 TEL. 610-454-8000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental Drug Products
Center for Drug Evaluation and Research
Office of Drug Evaluation V
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

AMENDMENT

July 14, 2000

BC



NDA No. 20-985

- Cream, 0.5%

(fluorouracil cream)

INFORMATION AMENDMENT: Chemistry, Manufacturing and Controls

Dear Dr. Wilkin.

has informed Dermik in a March 31, 2000 letter that their Drug Master File No. — was amended. We have been told that this DMF amendment provides for a

The resulting product meets all specifications required by USP.

This letter serves as an amendment to the Chemistry, Manufacturing and Controls section of the Cream NDA No. 20-985.

If you have any questions or comments regarding this submission, please contact me at (610) 454-3027.

Sincerely,

James P. Momp

James P. Thompson

Manager

Worldwide Regulatory Affairs

cc: Debra L. Pagano
Philadelphia District Pre-Approval Manager
U.S. Food and Drug Administration
Room 900, U.S. Customhouse
2nd and Chestnut Streets
Philadelphia, PA 19106-2973

BEST POSSIBLE COPY

ORIGINAL

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL. 610-454-8000

August 2, 2000

Jonathan Wilkin, MD, Director Food and Drug Administration Center for Drug Evaluation and Research Division of Dermatologic and Dental Drug Products (HFD-540) 9201 Corporate Boulevard Building No. 2, Second Floor, Room N115 Rockville, MD 20850



NDA No. 20-985

4 Cream, 0.5% (fluorouracil cream)

Amendment to a Pending Application Response to FDA Request for Information

Dear Dr. Wilkin:

Reference is made to the facsimile dated July 31, 2000 we received from DDDDP Project Manager Ms. Victoria Lutwak requesting additional information for the (fluorouracil cream) Cream 0.5% medical reviewer.

Included in this submission is Dermik's response to Ms. Lutwak's request.

Thank you for your attention. Please contact me at (610) 454-3027 if you have any questions.

Sincerely,

James P. Thompson Regulatory Manager

Worldwide Regulatory Affairs

BEST POSSIBLE COPY

ORIGINAL

500 ARCOLA ROAD P.O. BOX 1200 COLLEGEVILLE, PA 19426-0107 TEL, 610-454-8000

August 4, 2000

Jonathan K. Wilkin, M.D., Director
Division of Dermatologic and Dental Drug Products (HFD-540)
Center for Drug Evaluation and Research
Food and Drug Administration
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

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AUG O 3000

RESENTER

NEW CORRESP

NDA 20-985
——Cream 0.5%
(fluorouracil cream)

CHANGE OF ADDRESS

Dear Dr. Wilkin:

Reference is made to our New Drug Application for Cream 0.5% (fluorouracil cream).

Please be advised that, effective August 16, 2000, Dermik Laboratories, Inc., the sponsor of the referenced NDA, will move from their Collegeville, Pennsylvania facility to a new facility in Berwyn. Pennsylvania. Our new address is:

Dermik Laboratories, Inc. 1050 Westlakes Drive Berwyn, PA 19312

Also, please be aware that during a five-day period beginning Friday, August 11, 2000 and ending Tuesday, August 15, 2000, Dermik's office telephones and fax machine will be out of service. However, Ms. Alina Ziglinski, a Dermik representative, will be available for telephone calls at (610) 454-3033 and fax messages can be sent to (610) 454-5287.

I will continue to be the primary FDA contact person for Dermik. In addition, Alicia Cabrelli is also authorized as a Dermik contact person. Her telephone number is (484) 595-2775. My new telephone number is (484) 595-2785 and our new fax number is (484) 595-2785.

If you have any questions regarding our relocation or the referenced application, please feel free to contact me at the above listed telephone number.

Sincerely,

Banes P. Manpen

REST POSSIBLE COPY

James P. Thompson Manager. Regulatory Affairs

ORIGINAL

Dermik Laboratories, Inc. Facsimile Cover Page

Date: August 14, 2000

To: Ms. Victoria Lutwak

Project Manager

Fax Number: 301 827-2075

From: James P. Thompson

Manager, Regulatory Affairs

Phone #: 610 454-3027 **Fax Number:** 610 454-5287

Pages Sent: 1

Vicky,

The names that follow are the trade names we are proposing for our fluorouracil product in order of preference

Please call me at 610 454-3027 if you have any questions. I can be reached at this number tomorrow also.

James P. Mompaon

CH CHICANAL

DERMIK L	ABORATORIES, INC.	A RHÓNE-POULENC RORER COMPANY	
1050 Westlakes Dr Berwyn, PA 1931	ive 2	C.C. Okun	
Alicia Cabrelli Regulatory Analy	st	Decemp Hattance	
TEL ++ 484-595-7 FAX: ++ 484-595-	2775 2785	datance	
	FAX TRANSMIS	SION	
DATE & TIME: TO: COMPANY: FAX: RE:	09/29/00 11:17 AM Vickey Lutwak, Project Manager Food and Drug Administration 301-827-2075 NDA 20-985Cream, 0.5%	my question was	
PAGES:	(fluorouracii cream) 5 \(\rho \ 8^2 \)	They added #143 VL	

Confidential: For Your Eyes Only

Carrelli

Dear Vickey-

Per your voice mail message to Jim Thompson on September 29, 2000, attached for the Division's review are the following documents referencing the above referenced NDA.

- 1. Package Insert Pg. 1: Change from ______to "methyl methacrylate/glycol dimethacrylate crosspolymer"
- 2. Package Insert Pg. 8: Delete "Collegeville, PA 19426 USA" to "Berwyn, PA 19312, USA".
- 3. Copy of letter from Cosmetic, Toiletry, and Fragrance Association (CTFA) regarding the change in the International Nomenclature Cosmetic Ingredient (ICNC) name for the microsponge.

If you have any questions, please feel free to contact me at 484-595-2775.

Kind regards,

Alicia Cabrelli

BEST POSSIBLE COPY

Dedicated to Desput	BORATORIES, INC.	A RHONE-POULENC RORER COMPANY	
1050 Westlakes Driv Berwyn, PA 19312	ve.	Okun Vanghan Docamp Hattan	
Alicia Cabrelli Regulatory Analys			
TEL. ++ 484-595-27 FAX: ++ 484-595-2	775 785		
	FAX TRANSMISS	SION	
_	09/29/00 11:17 AM Vickey Lutwak, Project Manager Food and Drug Administration 301-827-2075 NDA 20-985Cream, 0.5% (fluorouracil cream)	Moter My question was #2 They added #1 # 3	
	5 p 82	世ノよる	

Confidential: For Your Eyes Only

Dear Vickey-

Per your voice mail message to Jim Thompson on September 29, 2000, attached for the Division's review are the following documents referencing the above referenced NDA.

- 1. Package Insert Pg. 1: Change from methacrylate/glycol dimethacrylate crosspolymer".
- 2. Puckage Insert Pg. 8: Delete " "Collegeville, PA 19426 USA" to "Berwyn, PA 19312, USA".
- 3. Copy of letter from Cosmetic, Toiletry, and Fragrance Association (CTFA) regarding the change in the International Nomenclature Cosmetic Ingredient (ICNC) name for the microsponge.

If you have any questions, please feel free to contact me at 484-595-2775.

Kind regards, perelli

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WITHHOLD 2 PAGE (S)

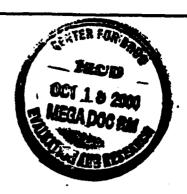
Draft

Liabeling

1050 WESTLAKES DRIVE BERWYN, PA 19312 484-595-2700

October 17, 2000

Jonathan Wilkin, MD, Director
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Dermatologic and Dental Drug Products (HFD-540)
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850



AMENDMENT BL

NDA No. 20-985

TRADENAME Cream, 0.5% (fluorouracil cream)

Amendment to a Pending Application Response to FDA Request for Information

Dear Dr. Wilkin:

Reference is made to the telephone conversation on September 29, 2000 between DDDDP Project Manager Ms. Victoria Lutwak and Dermik's Mr. James Thompson, requesting the following information with reference to fluorouracil cream 0.5%.

- 1. Package Insert Pg. 1: Change from "to "methyl methacrylate/glycol dimethacrylate crosspolymer". (see attached)
- 3. Copy of letter from Cosmetic, Toiletry, and Fragrance Association (CTFA) regarding the change in the International Namenclature Cosmetic Ingredient (ICNC) name for the microsponge. (see attached)

Thank you for your attention: Please contact me at 484-595-2795 if you have any questions.

Sincerely,

James P. Mempon

James P. Thompson Regulatory Manager Worldwide Regulatory Affairs

BEST POSSIBLE COPY

Encl.

UKIGINAL



DERMIK LABERATORIES, INC.

50 WESTLAKES DRIVE ERWYN, PA 19312 \$4-595-2700

October 23, 2000

NDA ORIG AMENDMENT

BL official

OCT 2 4 2000 MEGA DOG RM

Jonathan Wilkin, MD, Director
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Dermatologic and Dental Drug Products (HFD-540)
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115

NDA No. 20-985 TRADENAME Cream, 0.5% (fluorouracil cream)

SPONSOR DRAFT LABELING

Dear Dr. Wilkin:

Rockville, MD 20850

Reference is made to Dermik's response to the Division's draft labeling sent via facsimile on Monday, October 16, 2000 and electronically on Tuesday, October 17, 2000 from DDDDP Project Manager, Vickey Lutwak. Please be advised that the following documents containing Dermik's comments and proposals concerning the labeling proposed by DDDDP were forwarded electronically to Ms. Lutwak on Friday, October 20, 2000.

The following documents are enclosed:

- 1. 5-FU-rationaletts.doc- (The location reference in the Draft-102000-withrevisionmarks for each of the proposed changes, and the reasons for the change are listed.)
- 2. Draft-102000-withressionmarks.doc
 - Draft-102000-clean.
- Revised data- ndg20 Spackageinsert-DATA for bar charts. (For 1st three bar graphs in package insert-Page 4, Lines 97-114)

Thank you for your attention. Please contact me at 484-595-2795 if you have any questions.

Sincerely,

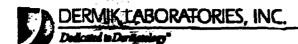
Dames P. Mimpson

James P. Thompson
Regulatory Manager
Worldwide Regulatory Affairs

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Encl.



. A RHÔNE-POULENC RORER COMPANY

1050 Westlakes Drive Berwyn, PA 19312

Alicia Cabrelli Regulatory Analyst

TEL. ++ 484-595-2775 FAX: ++ 484-595-2785

FAX TRANSMISSION

DATE & TIME:

10/24/00 11:12 AM

TO:

Vickey Lutwak, Project Manager

COMPANY:

Food and Drug Administration

FAX:

301-827-2075

RE:

NDA 20-985

TRADENAME 0.5% fluorouracil cream

PAGES: 5

Confidential: For Your Eyes Only

Dear Vickey-

Per our previous telephone discussions, attached is the document referencing the following commitments:

- 1. Phase IV
 - Chemistry and Clinical
- · 2. Official Submission of Tradename

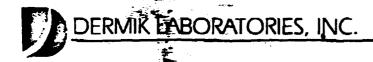
If you have any questions, please feel free to contact me at 484-595-2775 or Jim at 484-595-2795.

Kind regards,

Alicia Cabrelli

Regulatory Analyst

APPEARS THIS WAY
ON ORIGINAL



1050 WESTLAKES DRIVE BERWYN, PA 19312 484-595-2700

October 24, 2000 -

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Jonathan Wilkin, MD, Director
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Dermatologic and Dental Drug Products (HFD-540)
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

NDA No. 20-985 fluorouracil Topical Cream, 0.5%

Amendment to a Pending Application
Response to FDA Request for Information
Proposed Tradenames

Dear Dr. Wilkin:

Reference is made to recent telephone conversations representatives of Dermik Laboratories, Inc. had with representatives of the FDA's Division of Dermatological and Dental Drug Products (DDDDP) concerning commitments Dermik was requested to make in this New Drug Application. As a result of these conversations, Dermik commits to the following:

Dermik will not hold or store the bulk fluorouracil drug product for more than from the time of manufacture to the time of packaging.

Dermik will not _____ drug product without the submission and approval of a supplemental application describing the _____ procedure.

Reference is also made to an October 13, 2000 facsimile transmission from DDDDP Project Manager, Ms. Vickey Lutwak, recommending that Dermik commit to a Phase IV study to assess post-treatment safety and efficacy of our fluorouracil Topical Cream 0.5% product.

As recommended by DDDDP, Dermik commits to a Phase IV study or studies that, together with the patients already treated with our fluorouracil Topical Cream product in controlled clinical trials, will enable Dermik to reach the number of patients treated for actinic keratosis of the face and/or scalp as recommended in the ICH EIA safety guidance. In the study or studies, Dermik will also address the additional safety and efficacy issues delineated in the referenced facsimile (common skin areas not previously treated, recurrence, re-treatment, eye irritation, etc.)

The study protocol or protocols will be submitted to the Agency for review prior to the conduct of said study or studies to assure that the study or studies will address the concerns of the Agency with regard to the use

NDA 20-985 Phase IV Contentionent

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of the product for the lightment of actinic kerososis. Dermik will initiate the study or studies within one year following the approval of our application. The study or studies will be completed no later than three years after it's (their) initiation, end the results submitted to the Agency within one year after completion.

In addition to these commitments, Dermik is formally submitting the following new tradenames we are proposing for our fluorouracil Topical Cream product:

1. Carac

2. ———

These names are the same as those submitted verbally to Ms. Vicky Lutwak on October 17, 2000.

If you have any questions concerning our commitments or our proposed product name, please contact us at 484-595-2795.

Thank you for your continuing cooperation.

Sincerely,

James P. Thompson

James P. Thompson Regulatory Manager Worldwide Regulatory Affairs

Enci.

APPEARS THIS WAY ON ORIGINAL

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Form Approved: OMB No. 0910-0338

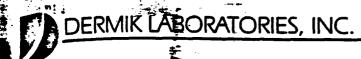
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Expiration Date: March 31, 2003 **FOOD AND DRUG ADMINISTRATION** See OMB Statement on page 2. APPLICATION TO MARKET A NEW DRUG, BIOLOGIC. FOR FDA USE ONLY OR AN ANTI與OTIC DRUG FOR HUMAN USE APPLICATION NUMBER (Title 21, Code of Federal Regulations, Parts 314 & 601) APPLICATION INFORMATION NAME OF APPLICANT DATE OF SUBMISSION Dermik Laboratories, Inc. October 24, 2000 TELEPHONE NO. (Include Area Code) FACSIMILE (FAX) Number (Include Area Code) 484-595-2795 484-595-2785 APPLICANT ADDRESS (Number, Street, City, State, Country, 21P Cade or Mail Code. AUTHORIZED U.S. AGENT NAME & ADDRESS (Number, Street, City, State, and U.S. License number if previously issued): ZIP Code, wieshore & FAX number) IF APPLICABLE 1050 Wesdakes Drive Berwyn, PA 19132 PRODUCT DESCRIPTION topical fluorouracil NEW DRUG OR ANTIBIOTIC APPLICATION NUMBER, OR BIOLOGICS LICENSE APPLICATION NUMBER (15 previously issued) NDA 20-985 ESTABLISHED NAME (e.g., Proper name, USP/USAN name) PROPRIETARY NAME (trade name) IF ANY (fluorouraci) cream) CHEMICAL/BIOCHEMICAL/BLOOD PRODUCT NAME (I/ any) CODE NAME (If any) 5-fluoro-2,4(1H,3H)-pyrimidinedione DL-6025 STRENGTHS: ROUTE OF ADMINISTRATION: DOSAGE FORM: 0.5% Topical Cream (PROPOSED) INDICATION(S) FOR USE: Topical Treatment of actnic keratosis APPLICATION INFORMATION APPLICATION TYPE X NEW DRUG APPLICATION (21 CFR 314.50) ABBREVIATED NEW DRUG APPLICATION (ANDA, 21 CFR 314.94) BIOLOGICS LICENSE APPLICATION (21 CFR Part 601) IF AN NOA, IDENTIFY THE APPROPRIATE TYPE X 505 (b)(1) ☐ 505 (b)(2) IF AN ANDA, OR 505(b)(2), IDENTIFY THE REFERENCE LISTED DRUG PRODUCT THAT IS THE BASIS FOR THE SUBMISSION Name of Drug Holder of Approved Application ORIGINAL APPLICATION AMENDMENT TO A PENDING APPLICATION TYPE OF SUBMISSION (check one) RESUBMISSION ANNUAL REPORT ESTABLISHMENT DESCRIPTION SUPPLEMENT **EFFICACY SUPPLEMENT** LABELING SUPPLEMENT CHEMISTRY MANUFACTURING AND CONTROLS SUPPLEMENT X OTHER IF A SUBMISSION OF PARTIAL APPLICATION. PROVIDE LETTER DATE OF AGREEMENT TO PARTIAL SUBMISSION: CBE IF A SUPPLEMENT, IDENTIFY THE APPROPRIATE CATEGORY ☐ CBE-30 ☐ Prior Approval (PA) REASON FOR SUBMISSION - Sponsor's Phase IV Commitment and submission of Tradename OVER THE COUNTER PRODUCT (OTC) PROPOSED MARKETING STATUS (CERTIFICE) PRESCRIPTION PRODUCT (Rx) PAPER AND ELECTRONIC ELECTRONIC NUMBER OF VOLUMES SUBMITTED THIS APPLICATION IS ESTABLISHMENT INFURNATIOS (Fill establishment information should be provided in the body of the Application.) Provide locations of all manufacturing, packaging and control sites for drug substance and drug product (continuation sheets may be used if necessary). Include name, address, contact, telephone number, registration number (CFN), DMF number, and manufacturing steps and/or type of testing (e.g. Final damage form, Stability testing) conducted at the site. Please indicate whether the site is ready for inspection or, if not, when it will be ready. See Original Application Cross References (list related License Applications, INDs, NDAs, PMAs, 510(k)s, IDEs, BMFs, and DMFs referenced in the current application) See Original Application

FORM FDA 356k (4/00)

Creamed by Medie Arts/USDHIHS: (301) 443-2454

This a	pplication conta	ins the following items: (C	heck all that app	(y)				
	1 Index							
	2. Labeling (cha	chos)- Draft	Labeling	Final Printed Labeling				
	3. Summary (21 CFR 34.50 (c))							
	4. Chemistry section 3							
	A. Chemistry, manufacturing, and controls information (e.g., 21 CFR 314.50 (d)(1); 21 CFR 601.2)							
	B. Samples (2F GFR 314.50 (e)(1); 21 CFR 601.2 (a)) (Submit only upon FDA's request)							
	C. Methods validation package (e.g., 21 CFR 314.50 (e)(2)(i); 21 CFR 601.2)							
	5. Nonclinical pharmacology and toxicology section (e.g., 21 CFR 314.50 (d)(2); 21 CFR 601.2)							
	6. Human pharmacokinetics and bioavailability section (e.g., 21 CFR 314.50 (d)(3); 21 CFR 601.2)							
	7. Clinical Microbiology (e.g., 21 CFR 314.50 (d)(4))							
	8. Clinical data section (e.g., 21 CFR 314.50 (d)(5); 21 CFR 601.2)							
	9. Safety update report (e.g., 21 CFR 314.50 (d)(5)(vi)(b); 21 CFR 601.2)							
	10. Statistical section (e.g., 21 CFR 314.50 (d)(6); 21 CFR 601.2)							
	11. Case report tabulations (e.g., 21 CFR 314.50 (f)(1); 21 CFR 601.2)							
	12. Case report forms (e.g., 21 CFR 314.50 (f)(2); 21 CFR 601.2)							
	13. Patent information on any patent which claims the drug (21 U.S.C 355 (b) or (c))							
	14. A patent certification with respect to any patent which claims the drug (21 U.S.C 355 (b)(2) or (j)(2)(A))							
	15. Establishment description (21 CFR Part 600, if applicable)							
	16. Debarment certification (FD&C Act 306 (k)(1))							
	17. Field copy certification (21 CFR 314.50 (k)(3))							
	18. User Fee Cover Sheet (Form FDA 3397)							
	19. Financial Info	ormation (21 CFR Part 54)						
X	20. OTHER (Spe	cify) Sponsor's Phase IV Comm	itments and submissio	n of Tradename				
I agree to update this application with new safety information about the product that may reasonably affect the statement of contraindications, warnings, presautions, or adverse reactions in the draft labeling. I agree to submit safety update reports as provided for by regulation or as requested by FDA. If this application is approved, I agree to comply with all applicable laws and regulations that apply to approved applications, including, but not limited to the following: 1. Good manufacturing practice regulations in 21 CFR Parts 210, 211 or applicable regulations, Parts 606, and/or 820. 2. Biological establishment standards in 21 CFR Parts 600. 3. Labeling regulations in 21 CFR Parts 201, 666, 610, 660, and/or 809. 4. In the case of a prescription drug or biological product, prescription drug advertising regulations in 21 CFR Part 202. 5. Regulations on making changes in application in FD&C Act Section 506A, 21 CFR 314.71, 314.72, 314.97, 314.99, and 601.12. 6. Regulations on Reports in 21 CFR 314.80, 314.81, 600.80, and 600.81. 7. Local, state and Federal environmental impact laws. If this application applies to a drug-graduet that FDA has proposed for scheduling under the Controlled Substances Act, I agree not to market the								
product until the Drug Enforcement Aditionistration makes a final scheduling decision. The data and information in this submission like been reviewed and, to the best of my knowledge are certified to be true and accurate.								
Wernin	g: A willfully false sta	Hernent is Perinninal offense, U.S. C	code, title 18, section 100	<u>)[</u>				
· —		BLE OFFICIAL OR AGENT	TYPED NAME AND James P. Thompson		DATE October 24, 2000			
100	Thorne a	Thinper	Warldwide Regulate	xy Affairs				
	ADDRESS (Street, City, State, and ZIF Code) Telephone Number							
,	1050 Westlakes Drive							
Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:								
Food an	Coler, HFM-99 140) Resholds Biles From the Resholds Biles An agency may not custome to appearing and a place of information unless it displays a currently valid OMB control number.							



1050 WESTLAKES DRIVE BERWYN, PA 19312 54-595-2700

October 25, 2000

NDA ORIG AMENDMENT



Jonathan Wilkin, MD, Director
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Dermatologic and Dental Drug Products (HFD-540)
9201 Corporate Boulevard
Building No. 2, Second Floor, Room N115
Rockville, MD 20850

BL

NDA No. 20-985 TRADENAME-Cream, 0.5% (fluorouracil cream)

SPONSOR DRAFT LABELING

Dear Dr. Wilkin:

Reference is made to a teleconference on October 24, 2000 with representatives of the FDA's Division of Dermatological and Dental Drug Products and Dermik Laboratories, Inc.

Please be advised that the following document contains Dermik's comments and proposals concerning the label discussions that were held on October 24, 2000.

The following document is enclosed:

1. Draft2-102400-withrevisionmarks.doc

Thank you for your attention. Please contact me at 484-595-2795 if you have any questions.

Sincerely,

James P. Thompson

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Regulatory Manager
Worldwide Regulatory Affairs

Encl.

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